


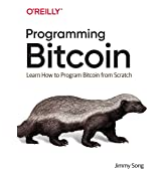
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From the Publisher

The Lightning Network (LN) is a second layer peer-to-peer network that allows us to make Bitcoin payments “off-chain,” meaning without committing them as transactions to the Bitcoin blockchain.

The Lightning Network gives us Bitcoin payments that are secure, cheap, fast, and much more private, even for very small payments.

Building on the idea of payment channels, first proposed by Bitcoin’s inventor Satoshi Nakamoto, the Lightning Network is a routed network of payment channels where payments “hop” across a path of payment channels from the sender to the recipient.

The initial idea of the Lightning Network was proposed in 2015 in the groundbreaking paper “The Bitcoin Lightning Network: Scalable Off-Chain Instant Payments,” by Joseph Poon and Thaddeus Dryja. By 2017, there was a “test” Lightning Network running on the internet, as different groups built compatible implementations and coordinated to set some interoperability standards. In 2018, the Lightning Network went “live” and payments started flowing.

In 2019, Andreas M. Antonopoulos, Olaoluwa Osuntokun, and René Pickhardt agreed to collaborate to write this book. It appears we have been successful!

**Intended Audience**

This book is mostly intended for technical readers with an understanding of the fundamentals of Bitcoin and other open blockchains.

Editorial Reviews

About the Author

Andreas M. Antonopoulos is a best-selling author, speaker, educator, and highly sought after expert in Bitcoin and open blockchain technologies. He is known for making complex subjects easy to understand and highlighting both the positive and negative impacts these technologies can have on our global societies.

Andreas has written two more best-selling technical books for programmers with O'Reilly Media, Mastering Bitcoin and Mastering Ethereum. He has also published The Internet of Money series of books, which focus on the social, political, and economic importance and implications of these technologies. Andreas produces free educational content on his YouTube channel weekly, and teaches virtual workshops on his website. Learn more at [aantonop.com](#)

Olaoluwa Osuntokun is the co-founder and CTO of Lightning Labs, and also the lead developer of Ind, one of the main implementations of Lightning. He received his B.S and M.S in Computer Science from UCSB and was a member of the Forbes 30 Under 30 class of 2019. During his graduate studies he focused on the field of applied cryptography, specifically encrypted search. He has been an active Bitcoin developer for over 5 years, and is an author of several Bitcoin Improvement Proposals (BIP 157+158). These days, his primary focus lies in building, designing, and evolving private, scalable off-chain blockchain protocols, such as Lightning.

René Pickhardt is a trained mathematician and data science consultant who uses his statistical knowledge to do research with NTNU about pathfinding, privacy, reliability of payments and service level agreements of the Lightning Network. René maintains a technical and developer-oriented Youtube channel about the Lightning Network and has answered roughly half of the questions about the Lightning Network on Bitcoin Stackexchange making him the go-to point for almost all new developers who want to join the space. René has held numerous workshops about the Lightning network in public and private, including teaching students of the 2019 Chaincode Labs residency together with other core Lightning Developers.

Product details

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About the authors

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Andreas M. Antonopoulos

Andreas M. Antonopoulos is an acclaimed author, speaker, educator, and one of the world's foremost bitcoin and open blockchain experts. Andreas makes complex subjects accessible and easy to understand. He is known for delivering electric talks that combine economics,

[See more on the author's page >](#)

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René Pickhardt

René Pickhardt is researching the reliability of the payment process on the Lightning Network. Together with his co-authors he created an imbalance measure for Lightning nodes, proposed Just in Time Routing (JIT Routing), introduced Probabilistic payment delivery and

[See more on the author's page >](#)

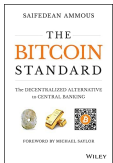
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 Neeraj Badaya

★★★★★ **Another great book by Andreas!!**


Reviewed in the United States us on March 2, 2022

**Verified Purchase**

I am Patreon and fan of Andreas !! Book is really informative and similar to earlier books of Mastering Bitcoin and Ethereum.  
You can consider these books as reference books where you can always refer to understand basics of this complicated technology.  
Great book Andreas and team !! Thanks for all your contribution to the community. Keep up the great work !!

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 Brian Connelly

★★★★★ **Understandable by non-technical.**

Reviewed in the United States us on May 9, 2022

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Good balance between technical and practical

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 Ryan

★★★★★ **Good as usual**

Reviewed in the United States us on December 29, 2021

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Antonopoulos has clear and thorough explanations throughout all of his books. I would recommend reading this one, Mastering Bitcoin and Mastering Ethereum to build a strong foundation in blockchain.

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 Galt137

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R. Weissmann

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Ausführlich und gut verständlich geschrieben. Wird wohl die LN Bibel. Gut aufgebaut, mit einem Zoom-In Ansatz, d.h. von einfach zu schwer, so dass für jeden was dabei ist. Topp.

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Jonas

★★★★★

Herausragendes Buch für breite Zielgruppe (Bitcoin Buch #1)

Reviewed in Germany DE on July 17, 2022

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Mit großer Vorfreude habe ich das Lesen des Buches begonnen und das Buch innerhalb weniger Wochen quasi verschlungen. Das Buch hat mich wie ein Roman gefesselt. Inzwischen habe ich das Buch ein paar Mal gelesen.

Besonders begeistert hat mich, dass das Buch sowohl Grundlagen und Intuitionen beinhaltet - und somit ein breites Verständnis vermittelt -, aber eben auch technologische Deep Dive. Somit kann man sich je nach Präferenz ein breiteres Verständnis des Lightning Netzwerks oder aber auch ein sehr fundiertes Technologie-Wissen aneignen.

Aus meiner Sicht ein absolutes "Must-Read" für jeden Krypto-Fan und -kenner und das beste Buch, was es heute zu Krypto gibt.

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